

19 April 2016

**QUARTERLY ACTIVITIES REPORT – MARCH 2016****HIGHLIGHTS**

- WORLD CLASS\* HIGH GRADE FLAKE GRAPHITE DEPOSIT CONFIRMED
- 18.8% TGC AND 43% JUMBO TO LARGE FLAKE SIZE CLASSIFICATION WITHIN GRAPHITIC SCHIST MAIN UNIT OF ECONOMIC INTEREST
- MAIDEN MEASURED AND INDICATED RESOURCE ESTIMATES ACHIEVED
- UPGRADED INFERRED RESOURCE ESTIMATE AND EXPLORATION TARGET
- PURIFICATION TESTS PRODUCE 99.93%+ BATTERY GRADE CONCENTRATE

Note: \* The "World Class" description used in the highlights above is based on extensive benchmarking by Graphitecorp of competing natural graphite projects around the world. Based on its ongoing internal review of international deposits, this classification includes deposits with over 1 million tonnes of contained graphite independently measured to JORC or equivalent standards and associated with a Measured Resource with an estimated mine stripping ratio under 3:1, an independent estimate of average Total Graphitic Carbon Content (TGC%) above 10% and a flake size distribution showing >15% Jumbo (>300 microns) and >30% Jumbo and Large (>150 microns). Graphitecorp considers deposits with these attributes likely to fall in the top quartile ranking for natural flake graphite deposits. This description of the deposit does not consider other critical elements that also materially impact prospects of economic extraction of the deposit such as sovereign risk, political and social stability, infrastructure, logistics, etc. Having a World Class deposit is one of many essential requirements for a project's successful economic extraction and commercial longevity.

**Graphitecorp Limited (ASX: GRA)** ("Graphitecorp" or "the Company") is pleased to provide the following Quarterly Activities Report for the March 2016 Quarter.

**ASSAY AND MLA OF PHASE 2 DRILLING PROGRAM SAMPLES**

The Phase 2 Drilling Program was completed in November/December 2015. The March 2016 Quarter included the assaying of the over 2,000 one-metre interval samples and Mineral Liberation Analysis (MLA) on various samples representing the different ore types at Mount Dromedary. The assay work was performed by Australian Laboratory Services (ALS) in Australia and the MLA work was performed by Activation Laboratories in Canada. The results of the Drilling program were released to the market on 18 February 2016.

Results from the Phase 2 Drilling Program confirm the presence of highly significant flake graphite mineralization at Mount Dromedary over the entire 500m strike length tested.

Three (3) graphite schist horizons containing high-grade (>10% Cg) graphite mineralization were intersected over the 500m strike length. The upper graphite schist horizon is 18-40m thick, the central horizon is about 6m thick and the lower horizon between 10-33m in thickness. The graphite schist mineralization clearly dips below, and continues to extend

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below a dolerite/micro-gabbro sill. Graphite mineralization remains open at depth and along strike to the north and to the south.

The main unit of interest is a graphite schist outcropping over a 3000m strike length with a high graphite grade commonly 15-25%.

Diamond core hole MD-12 twinned previously drilled RC hole MD-01 and RC hole MD-16 twinned previously drilled RC hole MD-04. Results confirm the integrity of the Phase 1 Drill Program results by repeating similar grades and widths of the graphite mineralization.

A single hole MD-35 was drilled in the Southern Graphite Zone to test the potential continuity of graphite mineralization between the Southern and Central Graphite Zones. This hole intersected 31m @ 16.17% C graphitic and confirms high grade graphite mineralization is present between the Southern and Central Graphite Zones.



**Photograph 1. Aerial view looking north of the Central Graphite Zone at the Mount Dromedary Graphite Project. (Helicopter flight courtesy of the Keats Family Pastoral Company).**

#### **UPGRADED INDEPENDENT JORC MINERAL RESOURCE ESTIMATE**

During the Quarter RPM was engaged to review all available data, procedures and results for the Mount Dromedary graphite deposit, including those from the recent Phase 2 Exploration Drilling and Testing program, and to prepare a JORC compliant Mineral Resource estimate. The upgraded independent JORC Mineral Resource estimate was released to the market on 14 March 2016.

The RPM report was undertaken in compliance with the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code 2012 Edition) prepared by the Joint Ore Reserves Committee of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("The JORC Code").

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The table below summarises the Total Mineral Resource. This Mineral Resource estimate is based on exploration drilling and test results covering less than 25% of the total mapped prospect area.

By far the most prominent ore type and zone throughout the deposit is the Graphitic Schist referred to below as the “High Grade” mineralisation. This zone of the deposit represents 916kt (or 80%) of the measured Contained Graphite Mineral Resource of 1,147kt.

This Graphitic Schist (“High Grade”) zone of the deposit is the highest grade with Total Graphitic Carbon content (TGC%) ranging between 15% and 35% and averaging 18.8%.

The Graphitic Schist (“High Grade”) zone of the deposit is the highest quality in terms of particle size distribution with 24.5% Jumbo flakes (>300 microns) and 43.4% Jumbo or large flake (>150 microns).

Table: Mineral Resource Estimate (4% Total Graphitic Carbon Cut-off)

Domain	Type	Total Mineral Resource			Cont. Graphite kt
		Tonnage Mt	TGC %	TC %	
High Grade (>10% TGC)	Weathered	0.8	17.7	18.9	148
	Primary	4.0	19.0	19.9	768
	<b>Sub-Total</b>	<b>4.9</b>	<b>18.8</b>	<b>19.7</b>	<b>916</b>
Medium Grade (4 to 10% TGC)	Weathered	0.7	5.1	6.2	35
	Primary	3.6	5.5	6.4	196
	<b>Sub-Total</b>	<b>4.3</b>	<b>5.4</b>	<b>6.4</b>	<b>232</b>
<b>Total</b>		<b>9.1</b>	<b>12.5</b>	<b>13.5</b>	<b>1,147</b>

Note:

- Totals may differ due to rounding, Mineral Resources reported on a dry in-situ basis.
- Flake sizes for the Mineral Resource is tabulated below.
- The Statement of Estimates of Mineral Resources has been compiled under the supervision of Mr. Robert Dennis who is a full-time employee of RPM and a Member of the AusIMM and AIG. Mr. Dennis has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Competent Person as defined in the JORC Code (2012).
- All Mineral Resources figures reported in the table above represent estimates at 29<sup>th</sup> February, 2016. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The Joint Ore Reserves Committee Code – JORC 2012 Edition).
- Reporting cut-off grade selected based on other known economically viable deposits around the world.
- TGC = total graphitic carbon.

Table: Graphitic Schist Flake Size Distribution (>10% Total Graphitic Carbon Cut-off)

Classification	Sieve Size (µm)	% in Interval	Cumulative %
Jumbo	>300	24.5	24.5
Large	180-300	18.9	43.4
Medium	150-180	6.8	50.2
Fine	75-150	23.9	74.1
Very Fine	<75	25.9	100.0

**Exploration Target**

In addition to the Mineral Resource, an Exploration Target was calculated based on the potential to expand the wireframes from the Mineral Resource.

For the Graphite Schist (“High Grade”) zone of the deposit the Exploration Target calculated by RPM is 22mt to 40mt of ore with an average grade range between 16% and 20% TGC equating to 3.5mt to 8mt of Contained Graphite.

The potential quantity and grade of the Exploration Target is conceptual in nature and there is insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Graphite Schist at Mount Dromedary has a known strike length of at least 3 km with variable width from 35 m to 350 m. Drilling at the Project extends to a vertical depth of approximately 90 m and the mineralisation was modelled to a depth of approximately 100 m below surface and drilling covered less than 25% of the total mapped prospect area.

RPM also noted that the best grades, thickest known intersections, and largest average flake sizes occur in the Graphitic Schist within the South Zone of the Project in Graphitecorp’s 100%-owned EPM 17323, drilled during the Phase 1 drilling program during 2015. RPM recommends that additional exploration should be pursued in this South Zone down-dip and along strike within EPM 17323 as this area was not drilled during Phase 2.

RPM considers the Exploration Target valid because Graphitecorp, subject to market conditions, currently intends to undertake a targeted drilling program over the next two years to define the mineralisation extents on a drill spacing of 200m (along strike) by 50m (across strike) for approximately 2,100 m of drilling. For the above reasons the Graphitic Schist (“High Grade”) zone of the deposit is the primary focus for the business and will be the focus of further exploration, testing, and feasibility assessment.



Image: HQ diamond core – Drillhole MD-12 - Central Zone of the Mount Dromedary December 2015.

**RPM comments regarding prospects for economic extraction**

The high grade nature of the mineralisation, the size of the deposit and the high amount (>35%) of large and jumbo flakes observed during MLA testing, as well as the proximity of the mineralisation to the surface (outcropping); suggest that the project has reasonable potential for eventual economic extraction.

For these reasons the Competent Person is of the opinion that the Mount Dromedary deposit is of sufficient grade, tonnage and flake size to support the CP’s opinion of reasonable prospects for eventual economic extraction using open pit mining techniques.

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## INITIAL PURIFICATION TEST RESULTS

During the latter part of the last Quarter and the early part of this Quarter a leading independent European laboratory specialising in mineral processing and purification in the graphite sector undertook purification testing on samples taken during the Phase 1 drilling program sampled in September last year at the Mount Dromedary Flake Graphite Project in Queensland, Australia.

Battery grade graphite of 99.93% was produced from those samples using a combination of mechanical and chemical processes and the laboratory advised that characteristics of the sample ore from the Mount Dromedary deposit offered the advantage to use this product as feed material for the promising market of spherical graphite in battery applications.

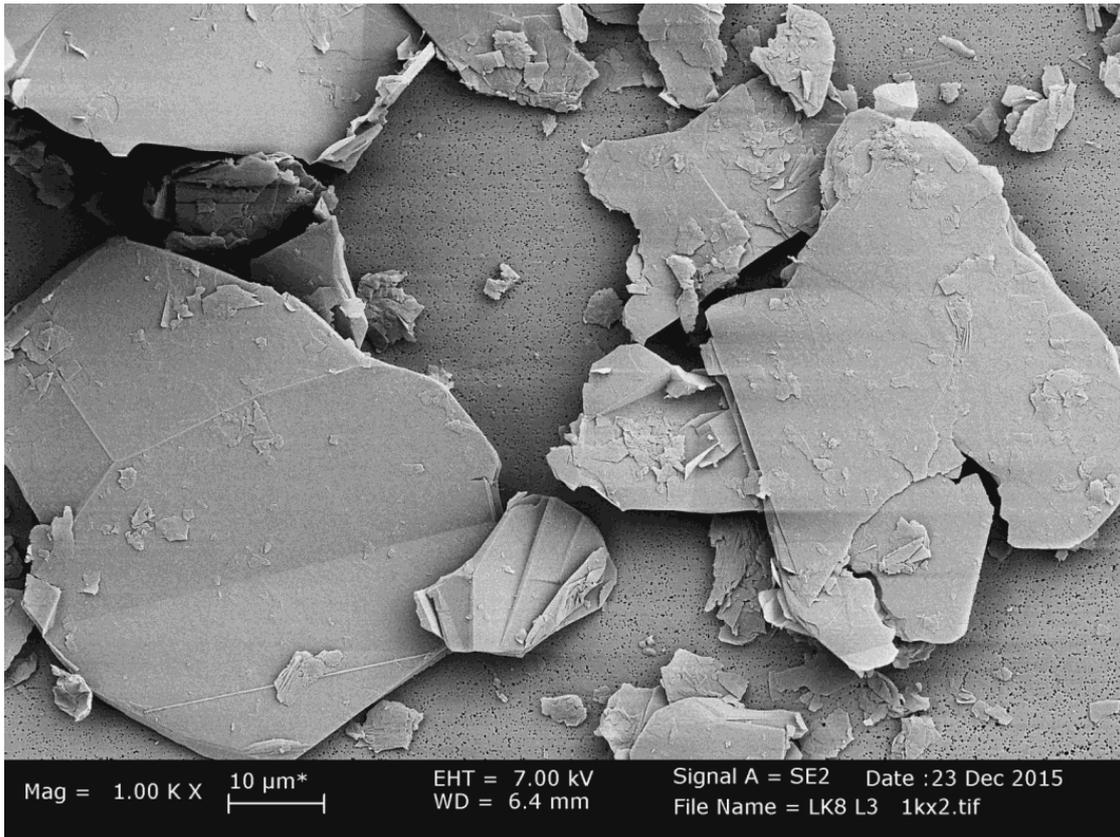
The laboratory also identified potential of using this graphite product in the following high tech graphite applications:

- Fuel cell applications
- Additive material for plastic or rubber industries
- Lubricants and releasing agents
- Powder forging, alloy and sintering control in powder metallurgical industry
- High temperature coatings
- Other battery applications
- Conductive plastic and polymer applications



**Above:** Photographs of graphite ore (RC chips) samples "MD 02 22-56 M" (left) and "MD 04 10-36 M" (right)

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**Above:** SEM micrograph of graphite flotation concentrate after conventional processing and chemical processing L3; Magnification 1.000x

**CONTINUING TESTWORK**

A detailed metallurgical testing program designed under guidance from RPM is underway with SGS Minerals Metallurgy and JK Tech in Australia.

This program is expected to complete in May and provide sufficient information for the development of initial processing plant flowsheet designs.

A small quality of saleable graphite concentrate will also be produced during this testwork and this material will be used for further purification and value add testing and for customer samples.

**ENVIRONMENTAL**

During the Quarter Graphitecorp completed a wet season environmental survey at the Mount Dromedary project area. Graphitecorp engaged NRA Environmental Consultant to plan and execute this work.

This survey collected important baseline fauna, flora, surface water, sediment and other environmental data and provided information to assist with environmental evaluation, planning and the preparation of an Environmental Authority Application.

This work is the first phase of a comprehensive environmental work program which Graphitecorp is undertaking this year which will culminate in the submission of an Environmental Authority Application to the Queensland Department of Environment and Heritage Protection and relate to a proposed graphite mining operation.

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## CORPORATE

Meetings were held with graphite buyers, processors and end-users in Asia during the Quarter. These meetings included discussions with leading battery manufacturers to understand their demand and quality expectations, and to establish arrangements with potential customers for evaluation of Mount Dromedary graphite concentrate samples.

The Board considers the collective results of the exploration, independent testing, technical study, Minerals Resource estimation and comparison benchmarking with competing projects around the world confirms this is a World Class\* natural flake graphite deposit.

This World Class\* deposit is favourably located with well-developed transport and mining supply infrastructure available. Key characteristics of the Mount Dromedary Graphite Project include:

- Location in Australia with low levels of sovereign risk, ability to provide long term security of supply, alternative sourcing to China and Africa, and higher environmental and other sustainability related standards
- Large open-cut deposit located within one kilometre of a sealed all-weather bitumen highway maintained by the State Government and gazetted for use by road-trains
- Daily road-train transport to the Ports available from major freight haulage companies with large-scale backhaul capacity
- Highway networks connect the project with Queensland export ports including the Port of Brisbane which is regularly serviced by major shipping liners and has backhaul capacity to target markets; and
- Located in a well-established mining region with abundant skills, services and experience, and playing a significant role in the Queensland economy.

The Board considers these strong project fundamentals and the positive demand outlook for specialised graphite products support additional investment, to further understand the deposit and to complete a detailed feasibility assessment of establishing a business to mine, process and market high quality graphite products into Asian and other global markets.

## SIGNIFICANT ASX ANNOUNCEMENTS

The following significant announcement was lodged with ASX during the March Quarter:

- Quarterly Activities Report for December 2015 (28 January 2016)
- Quarterly Cash Flow Report for December 2015 (28 January 2016)
- Phase 2 Drilling Program Results (18 February 2016)
- Initial Beneficiation Study Results (23 February 2016)
- Half Year Accounts (8 March 2016)
- Update Independent JORC Mineral Resource Estimate (14 March 2016)

## COMPETENT PERSON'S STATEMENT

The information in this "ASX Announcement" that relates to Mineral Resources and Exploration Target Estimate is based on information compiled by Mr Robert Dennis who is a Member of Australian Institute of Geoscientists and a full time employee of RPM Limited. Mr Dennis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dennis consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Information in this "ASX Announcement" that relates to Exploration Results was previously reported on 18 February 2016 titled "Phase 2 Drilling Program Results" and was compiled by Consulting Geologist Mr Christopher Sennitt, who is the Managing Director of Senlac Geologic Services Pty Ltd. The company is not aware of any new information for data that materially affects the information presented in this previous announcement.

**GRAPHITECORP LIMITED (ACN 157 690 830)**

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**TENEMENT LIST**

Tenement	Permit Holder	Grant date	Graphitecorp Graphite Rights	Expiry date
EPM 26025	Exco Resources Limited	13/12/2020	80%  (Sub-Blocks Normanton 3123 D, J, N, O and S)	25/05/2018
EPM 17323	Flamingo Copper Mines Pty Ltd (currently being transferred to Graphitecorp Limited pursuant to sale agreement)	20/10/2010	100%	19/10/2016

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**FOR FURTHER INFORMATION**

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**ABOUT GRAPHITECORP**

**Graphitecorp** (ASX: GRA) is a developer of one of the highest-grade flake graphite deposits in the world, located in Australia, and referred to as the Mount Dromedary Project.

The deposit includes a large high grade "Graphite Schist" mineralisation zone averaging 18.8% TGC (up to 35% TGC) with large flake size distribution being 43% jumbo to large flake size and outcropping over a strike-length of at least 3km with a variable width between 35m and 350m.

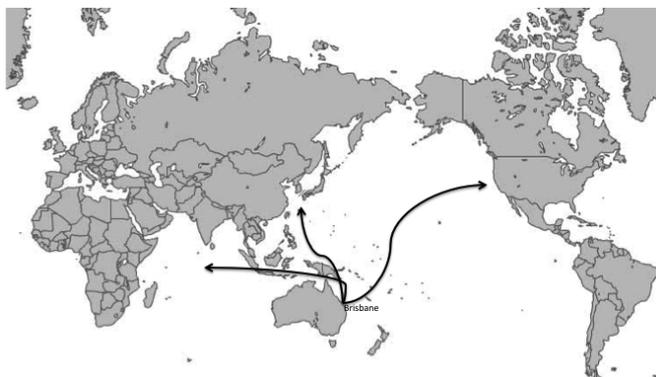
Graphitecorp has an 82% effective interest in the deposit, based on currently mapped surface area, with the remaining interest held by the Company's joint venture partner Washington H. Soul Pattinson and Company Limited (ASX: SOL) subsidiary Exco Resources Limited.

The project is favourably located 125km north of Cloncurry with well-developed transport and mining supply infrastructure available. Key characteristics of the Mount Dromedary Graphite Project include:

- Location in Australia with low levels of sovereign risk, ability to provide long term security of supply, alternate sourcing to China and Africa, and higher environmental and other sustainability related standards
- Large open-cut deposit located within one kilometre of a sealed all-weather bitumen highway maintained by the State Government and gazetted for use by road-trains
- Daily road-train transport to the Ports available from major freight haulage companies with large-scale backhaul capacity
- Highway networks connect the project with Queensland export ports including the Port of Brisbane which is regularly serviced by major shipping liners and has back-haul capacity to target markets; and
- Located in a well-established mining region with abundant skills, services and experience, and playing a significant role in the Queensland economy.

Given strong project fundamentals and positive demand outlook for specialised graphite products, Graphitecorp is diligently progressing a feasibility study with its joint venture partner to assess the economic opportunity of establishing a business to mine, process, manufacture and market high quality graphite products into Asian and other global markets.

For more information on Graphitecorp please visit our website at [www.graphitecorp.com.au](http://www.graphitecorp.com.au)



**Containerised Ocean Transport Possibilities: Port of Brisbane to Potential Asian, West Coast USA & European Graphite Users**

**GRAPHITECORP LIMITED (ACN 157 690 830)**

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